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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,937	04/09/2001	Yi Li	1488.1220003/EKS/EJH	8058

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EXAMINER	
CHANDRA, GYAN	

ART UNIT	PAPER NUMBER
1646	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 09/827,937	**Applicant(s)** LI ET AL.	
	Examiner Gyan Chandra	**Art Unit** 1646	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 July 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: 23-35 37-74
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see continued sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

HL

Continuation of 11 does not place the application in condition for allowance because: Applicants' arguments with respect to the rejection of claims 23-35 and 37-74 under 35 U.S.C. 101 as not supported by either a specific and substantial asserted utility or a well established utility have been fully considered but they are not persuasive. Applicants refer to the Utility Guidelines and argue that the specification discloses a specific biological activity that reasonably correlates to a disease condition that should establish a specific utility for the invention. Applicants emphasize that the specification (pg. 23, [0097] discloses that " antagonists for G-protein coupled receptors have been employed for treatment of hypertension, angina pectoris, myocardial infarction, ulcers, asthma, allergies, psychoses, depression, migrain, vomiting, stroke, eating disorders, migraine headaches, cancer and benign prostatic hypertrophy". Applicant argues that GPCRs work through adenylate cyclase pathway and EBI-2 being a GPCR should have a role in biological function. There are more than 1000 GPCRs that have diverse biological function. Mere homology of a protein with a GPCR does not provide function of a protein to one of skill in the art. One of skill in the art then has to find what this gene does which leads in to further experimention. Therefore, the discolosed homology of an about 54% with EDG-1 orphan GPCR to EBI-2 of the SEQ ID NO: 1, does not establish a nexus between the claimed antibody against EBI-2 and specific and substantial utility without significant further research.

Applicants argue that the Assertion of Utility for EBI-2 receptor is reasonable in view of the infromation available at the time of filing. They claim that the SEQ ID NO: 1 of the invention is closely related to certain GPCRs known to be induced upon EBV infrection and that GPCRs are found in numerous sites within a mammalian host. For example, dopamine is a critical neurotransmitter in the CNS and is a GPCR ligand (see Specification, [0013]). Applicants refer to their previous Remarks filed on 3/23/2005 that the EBI receptors are expressed in lympoid tissue and therfore has a role in platelet aggregration. Applicants' arguments have been fully considered but they are not persuasive because it is known in the art that GPCRs has diverse biological roles (Exhibit A-C). However, regarding the instant invention the specification (paragraph 0032) discloses that EBI-2 is identified from an umbilical vein endothelial cells, neutrophil leukocytes cells and corpus callosum cell and one of ordinary skill in the art would logically know the function and utility of a gene. A cDNA expression library is representative of mRNAs expressed in that tissue. Mere presence of a mRNA in a tissue does not provide function of a gene to one of skill in the art. One of skill in the art then has to find what this gene does which leads in to further experimention.

Applicants argue that thrombin GPCRs play role in cAMP activated platelet aggregration and Schafer (see Exhibit D, and also exhibit E-F) suggest that clopidogrel drug blocks platelet aggregation which could prevent myocardial infarction. They refer that Herbert et al (post filing art, Vascul. Med. 3: 113-121, 2003) teach that clopidogrel binds to EBI-2 receptors. However, the specification discloses that the claimed antibody can be used in potential diverse therapeutic and diagnostic applications including mental disorders, cancer, migraine, eating disorders, asthma, heart disease, psychoses, restenosis, Alzheimer's disease, Parkinson's disease, atherosclerosis and a number of others specification [0035, page 8, 0097, page 23, 0098, page 24, 0099, page 24] and therefore does not establish an asserted, specific, and real world utility.
In re Kirk, 153 USPQ 48, 53 (CCPA 1967) quoting the Board of Patent Appeals,
" We do not believe that it was the invention of the status to require the Patent Office, the courts, or the public to play the sort of guessing game that might be involved if an applicant could satisfy the requirements of the statutes by indicating the usefulness of a claimed compound in terms of possible use so general as to be meaningless and then, after his research or that of his competitors has definitely ascertained an actual use for the compound, adducing evidence intended to show that a particular specific use would have been obvious to men skilled in the particular art to which this use relates."

Applicants argue that Klapper et al (Exhibit G) used a monoclonal antibody raised against ErbB-2, an orphan receptor that belongs to a tyrosine kinase receptor family, inhibits tumor growth. Klapper et al teach that causitive relationships between cellular ErbB-2 content and the tumor's proliferation and aggressiveness have several supporting evidence. Therefore, antibodies against ErbB-2 extracellular domain are able to show tumor inhibitory effect (page2099, right column, lines 7 throgh end of the paragraph). However, the instant specification discloses that EBI-2 is identified from an umbilical vein endothelial cells, neutrophil leukocytes cells and corpus callosum cell and one of ordinary skill in the art would logically know the function and utility of a gene. A cDNA expression library is representative of mRNAs expressed in that tissue. Mere presence of a mRNA in a tissue does not provide function of a gene to one of skill in the art. The antibody against EBI-2 can be used in potential diverse therapeutic and diagnostic applications including mental disorders, cancer, migraine, eating disorders, asthma, heart disease, psychoses, restenosis, Alzheimer's disease, Parkinson's disease, atherosclerosis and a number of others specification [0035, page 8, 0097, page 23, 0098, page 24, 0099, page 24] . One of skill in the art then has to find what this gene does and then which assoicated disease (s) from the list can be treated, which leads in to further experimention.

The rejection of claims 23-35 and 37-74 under 35 U.S.C. 112, first paragraph for lacking enablement because the invention lacks utility is maintained for the reasons set forth above.

JANET L. ANDRES
SUPERVISORY PATENT EXAMINER